Ethyl Petroleum Additives Sauget, Illinois 62201 (618) 274-4000



January 24, 1986

Mr. Nicholas Longo On-Scene Coordinator Attnetion: 5HE-12 U.S. E.P.A. Region V 230 South Dearborn St. Chicago, IL 60604

Dear Mr. Longo:

Re: Administrative Order V-W-84-007 Groundwater Sampling Plan Response to Agency Comments of November 22, 1985

Ethyl has reviewed the Agency response on the proposed groundwater sampling system for the Ethyl Petroleum Additives plant at Sauget, Illinois with our groundwater consultants. Attachment I is a revised groundwater sampling plan which reflects the concerns raised in your response.

The location of two of the sampling wells has been changed to locate them closer to the black tank area and Unit 268 to confirm the absence or presence of 2,3,7,8-TCDD. An additional well is proposed west of Unit 268.

Flow rates in the water-bearing ground formation are estimated to be in the range of 0.5 to 1.0 foot per day. The direction of groundwater flow is away from the river during high water and toward the river during low water stages. This flushing action would move any contamination over relatively large distances, particularly considering the time elapsed since Agent Orange production by Monsanto ceased at this location. If the groundwater has been contaminated by sources at Unit 268 or the black tanks, samples of water taken at the sampling points indicated will show that fact as well as samples taken immediately under the potential sources.

Ethyl has serious concerns regarding placing sampling wells directly in areas where 2,3,7,8-TCDD has been measured at relatively high concentrations. We are expressly concerned about the possibility of carrying 2,3,7,8-TCDD from relatively shallow depths immediately below the ground surface to lower levels as the sampling well is constructed. To avoid this possibility, and the potential of a "false-positive" result due to soil transfer during construction, Wells 5 and 3 indicated in your response are not in the revised proposal.

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The sump section below the well screen is a standard design used by our consultants in many other locations. The volume of the sump will be added to the calculated volume of the sample well and be withdrawn from the well prior to obtaining a sample for analysis.

If you have any questions, or wish to discuss this proposal, please call me at (618) 274-4000.

Sincerely,

S. McWilliams Site Manager

SMcW:dj

Attachment